PAGE 1: COMBINED ALGORITHM FOR MANAGEMENT OF CHILDREN AND YOUTH WITH ADHD

Child or Youth with ADHD (mild to severe)

PATIENT AND FAMILY EDUCATION

The diagnosing physician or family physician should be able to provide the patient and their family with general information about ADHD, including (but not limited to):

- The causes of ADHD, including the genetic component of the disorder.
- How ADHD affects a child or youth's behaviour, and what parents and caregivers can expect to observe as a result.
- Available treatment options (both pharmacological and non-pharmacological) including risks, benefits and potential side-effects.
- Additional resources available in their community (see PAGE 6: RECOMMENDED RESOURCES FOR PATIENT & FAMLY EDUCATION)

Education can also be delivered through educators, school counsellors or mental health clinicians in the community.

For patient and family resources, visit: The Canadian ADHD Resource Alliance (caddra.ca) and/or The Centre for ADHD Awareness, Canada (caddac.ca)

Screen for medical, psychosocial or psychiatric comorbidities (see PSP Module on Child & Youth Mental Health re: ADHD)

Consider options for treatment, including non-pharmacological interventions. Ensure that the patient and family are involved in making decisions related to the child or youth's treatment plan. The school should also be engaged. ADDITIONAL DETAILS FOR FAMILY PHYSICIANS RELATED TO DIAGNOSIS AND TREATMENT CAN BE FOUND ON PAGES 3 AND 4

Medical Management Treat with medications as per CADDRA guidelines, EXCEPT in children age 5 or under, in which case Parent Behaviour Training is the first line treatment **COMPLICATED: UNCOMPLICATED:**

Core ADHD symptoms are resolved

and no secondary complications exist

Continue to treat and titrate

medications as per CADDRA

guidelines.

be required

Monitoring

Monitoring Tool

Metabolic Program

A NOTE ON MEDICATIONS

If additional medications are being considered,

recommended, and referral to a specialist may

For children and youth of all ages, prescription of Second-Generation Antipsychotics (SGAs)

when all other options have been exhausted.

Metabolic Assessment, Screening and

CAMESA Management Recommendations

Referral to the Provincial Mental Health

should only be considered as a last resort,

Physician Handbook for Metabolic

CAMESA Guidelines for Metabolic

for Metabolic Complications

appropriate pharmacovigilance is

- 1) Core ADHD symptoms not fully resolved; and/or
- 2) Secondary complications persist (aggression, family conflict, school/academic/occupational problems, peer relationship problems, etc).

RAPID ACCESS TO SPECIALIST SERVICES

In complicated cases where specialist consultation may be required, contact the RACE (Rapid Access to **Consultative Expertise) Line** Local: 604-696-2131 OR Toll-free: 1-877-696-2131

ADDITIONAL COMPLICATIONS OR CO-EXISTING DISORDERS

Some children and youth with ADHD also experience complex medical, psychosocial or psychiatric comorbidities (including learning disabilities) which can cause impairment in various facets of their life (e.g. home, school, social). In this case, referral to a specialist or specialized community-based services, such as a Child & Youth Mental Health Team, pediatrician, child & adolescent psychiatrist, youth addictions counsellor, special education education service, or regional specialized psychiatric service may be useful. Specialized community-based services can help support children, youth and their families (Please note that private, fee-for-service options may also be available).

AND FAMILY EDUCATION IS IMPORTANT!

> **FORMS OF PATIENT AND FAMILY EDUCATION/ SUPPORT MAY INCLUDE:**

ONGOING PATIENT

GENERAL **PARENTING SKILLS AND SUPPORT**

ADHD-**SPECIFIC PARENTING** SKILLS

ATTACHMENT THEORY

FOR ADDITIONAL DETAILS, SEE OPTIONS FOR PATIENT AND **FAMILY EDUCATION** (PAGE 2)

Creation of an ADHD-friendly environment*

Parent Behaviour Training (NOTE: Strategies included in this intervention are components of creating an ADHD-friendly environment).

Psychological Interventions

Collaborative problem-solving (CPS) (NOTE: This approach can be integrated with the two interventions listed above. CPS was designed to be used with particularly inflexible children. There is no research to support this intervention as a treatment for ADHD on its own, but anecdotally, it can be very useful).

Preschool & School Age Children

Social skills training (NOTE: The intervention must be implemented in the setting where the difficulty is occurring)

School Age Children, Youth & Young Adults

Organizational skills strategies

Educational Accommodations

Additional information and some suggested strategies can be found on **PAGE 9** or by visiting:

- CADDAC (see the "School" section)
- **CADDRA** (section for Educators under "Public Info")

*DEFINING AN ADHD-FRIENDLY ENVIRONMENT:

Individuals with ADHD are more likely to be successful in some environments than in others. Generally speaking, ADHD-friendly environments are encouraging, supportive, and structured. This can be created

- 1) Developing and maintaining a positive and collaborative support network (child, school staff, caregivers)
- 2) Establishing clear expectations for behaviour
- 3) Using external supports and visual reminders (e.g., lists, signs, clocks, schedules, cue cards)

Non-Pharmacological Interventions

- 4) Modifying the child's environment (e.g., minimizing distractions)
- 5) Increasing the child's motivation (e.g., introducing rewards and incentives for desired behaviour)

The goal is to support the child by changing the environment, the way adults interact with the child, and the nature of the tasks. The goal is not to change the child. Positive changes may occur, but most children will need consistent, long-term, external supports to compensate for their neurodevelopmental delays.

PAGE 2: OPTIONS FOR PATIENT & FAMILY ADHD EDUCATION

GENERAL INFORMATION ABOUT ADHD

The diagnosing physician should provide the patient and their family with general information about ADHD, including:

- The causes of ADHD, including the genetic component of the disorder.
- How ADHD affects a child or youth's behaviour, and what parents and caregivers can expect to observe as a result.
- Available treatment options (both pharmacological and non-pharmacological) including strength of evidence, risks, benefits and potential side-effects. Note: examples of non-pharmacological interventions include the parenting programs highlighted in the box below.
- Additional resources available in their community (see Patient & Family Education Resource List).

Education can also be delivered through educators, school counsellors or mental health clinicians in the community setting.

GENERAL PARENTING SKILLS AND SUPPORT

Some families may experience challenges related to their child or youth's ADHD, and may benefit from parenting training and support, including:

- Individual or group peer support through organizations such as the <u>Kelty Mental Health</u> <u>Resource Centre</u>, <u>The FORCE Society for Kids'</u> <u>Mental Health</u> and <u>CHADD</u>.
- General parenting skills training through programs such as:
 - o Strongest Families BC
 - o Triple P Parenting Program
 - o Incredible Years
 - Managing Tough Behaviours

ADHD-SPECIFIC PARENTING SKILLS

For some families, training in ADHD-specific parenting skills may be helpful. The <u>ADHD</u> <u>Parent Program</u> serves as an evidence-based model for the delivery of this education.

ATTACHMENT

For some families, attachment-based parenting programs may be helpful. The <u>CONNECT Parent Program</u> serves as a good model for the delivery of patient and family education related to attachment theory.

ADDITIONAL COMPLICATIONS OR CO-EXISTING DISORDERS

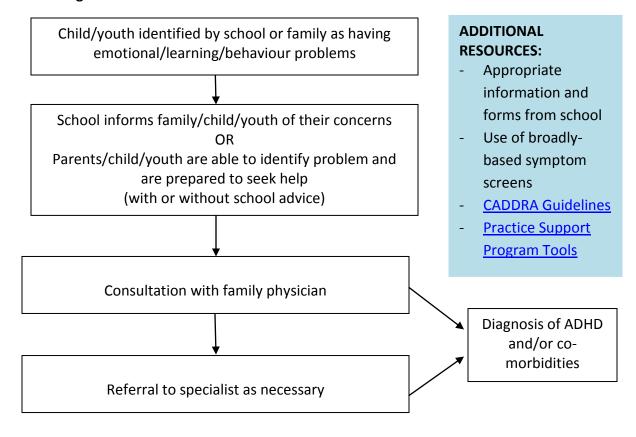
Some children and youth with ADHD also experience complex medical, psychosocial or psychiatric comorbidities (including learning disabilities) which can cause impairment in various facets of their life (e.g. home, school, social). In this case, referral to a specialist or specialized community-based services, such as a Child & Youth Mental Health Team, pediatrician, child & adolescent psychiatrist, youth addictions counsellor, special education service, or regional specialized psychiatric service may be useful. Specialized community-based services can help support children, youth and their families (Please note that private, fee-for-service options may also be available).

SPECIALIZED CARE

For very complex cases, further referral to the specialized <u>ADHD Clinic at BC Children's Hospital</u> may be required.

PAGE 3: RECOMMENDED VISIT FLOW FOR DIAGNOSIS AND TREATMENT OF ADHD FOR THE FAMILY PHYSICIAN

Algorithm for Diagnosis:



PAGE 4: VISIT-BY-VISIT GUIDE FOR THE FAMILY PHYSICIAN

Visit 1: Risk identification (0100) - 7 minutes

- Screening (3 questions ADHD/Depression/Anxiety)
- Provide SNAP-IV 18 or SNAP-IV 26

Visit 2: Caregiver/Parent Interview (0120) - 20 minutes

- Family history
- Developmental history
- Observe parental interaction
- Discuss criteria for diagnosis
- Educate re:
 - o Diagnosis
 - Treatment options (both pharmacological and non-pharmacological)
 - Provide references to <u>CADDRA</u>, <u>CADDAC</u>, etc. (see <u>PAGE 6: RECOMMENDED RESOURCES FOR PATIENT</u>
 FAMILY EDUCATION)
 - Core visit for therapeutic alliance; opportunity to make parents/caregivers students of the disorder rather than feeling victimized

Optional additional 0120 appointment at this stage if deemed necessary to confirm diagnosis or provide additional education to the patient and their family

Visit 3: Patient Visit - 30 minutes (14043) + 1-19 minutes (0100) = \$130 0R + 20+ minutes (0120) = \$160

- Review clinical metrics from parents/caregivers and school
- Connect with relevant school professionals to collect additional information about the child's behaviour in the school setting
- Confirm diagnosis
- Provide additional education related to treatment options and co-morbidities which frequently occur in conjunction with ADHD (see PAGE 2: OPTIONS FOR PATIENT & FAMILY EDUCATION)
- Review treatment plan and explore barriers to compliance
- Prescribe medication (see "Medication Management" on PAGE 1: COMBINED ALGORITHM)

Visit 4: 2 weeks later (0100 or 0120)

- Review clinical metrics from parents and school (SNAP-IV 18 or SNAP-IV 26)
- Connect with relevant school professionals to discuss any changes in the child's behaviour in the school setting.

Visit 5: 2 weeks later if not at target, 1 month later if at target

- Review SNAP-IV 18 or SNAP-IV 26

Once the diagnosis of ADHD has been made, 8 x 0120 visits per year are allowed, in addition to 4 telephone/email consults per year at \$15 each.

PAGE 5: VISIT-BY-VISIT GUIDE FOR THE FAMILY PHYSICIAN (CONT'D)

Session #	Task	Time	Billing Code
1	Meet patient and family Start diagnostic interview	7 mins	0100
2	Parent counselling session and discussion of treatment options	20 mins	0120
3	Review check sheets and complete diagnostic interview Consider starting medications and provide educational materials to patient and family Connect with relevant school professionals	30 mins Additional 1-19 minutes	14043 0100
		Additional 20+ minutes	0120
4	Confirm diagnosis Start medication Discuss parenting skills/educational resources Connect with relevant school professionals Review medication check sheets	20 mins	0120
5	Review medication sheets Discuss side-effects Titrate dose upwards	7 mins	0100
6	Review medication sheets Discuss side-effects Titrate dose upwards Note: there should be a follow-up appointment every 2 weeks after prescribing until target for prescription is met. Complicated cases may require a prolonged counselling session (0120) at any visit	7 mins	0100
7	In case of non-response or unacceptable side-effects, start new medications	20 mins	0120
8	Once patient is stable, give meds for 3 months	20 mins	0120
9	Follow up with patient and family at 3-month intervals	20 mins	0120

Note: Billing code 14043 = complex mental health billing code, which allows for ½ hour/Axis I diagnosis/8 x 0120 sessions and 4 telephone consults per year. Can also be funded separately for group visits per 15 minute window (e.g., for a school conference).

PAGE 6: RECOMMENDED RESOURCES FOR PATIENT & FAMILY EDUCATION

British Columbia-Based Resources for Information, Help Navigating the Mental Health Care System, and Individual/Family Support:

- Kelty Mental Health Resource Centre: http://www.keltymentalheatlh.ca/
- The F.O.R.C.E. Society for Kids' Mental Health: http://www.forcesociety.com/
- Children and Adults with Attention Deficit Disorder: http://www.chadd.org
 - National Resource Center on ADHD (A Program of CHADD): http://www.help4adhd.org/index.cfm?varLang=en

General Parenting Skills Training Programs

- Strongest Families BC
- <u>Triple P Parenting Program</u>
- The Incredible Years

Websites

ADHD-Specific Resources:

For Parents & Families:

- Centre for ADHD Awareness Canada (CADDAC): www.caddac.ca
- Canadian ADHD Resource Alliance (CADDRA) see "Public Information" tab: http://www.caddra.ca/cms4/
- ADHD Information on the Kelty Mental Health Resource Centre website: http://keltymentalhealth.ca/mental-health/disorders/attention-deficit/hyperactivity-disorder
- Here to Help BC: http://www.heretohelp.bc.ca/publications/factsheets/adhd-kids
- National Institute of Mental Health http://www.nimh.nih.gov/health/topics/attention-deficit-hyperactivity-disorder-adhd/index.shtml
- A Family AD/HD Resource: http://w3.addresources.org/
- American Academy of Child and Adolescent Psychiatry:
 http://www.aacap.org/cs/adhd a guide for families/resources for families adhd a guide for families
 (this link didn't work when I tried it)
- Doctor Hallowell's website http://www.drhallowell.com/add-adhd/
- ADDitude Magazine: www.additudemag.com
- LD Online: www.ldonline.org

For Children:

Kids Health.org: http://kidshealth.org/parent/medical/learning/adhd.html

For Teens:

Teen Mental Health (Canadian site- includes two animated videos for children and youth about ADHD)
 http://teenmentalhealth.org/for-families-and-teens/adhd-attention-deficit-hyperactivity-disorder/

Self-Advocacy:

- Centre for ADD/ADHD Awareness, Canada http://www.caddac.ca/cms/page.php?2
- BC Representative for Children and Youth: http://www.rcybc.ca/content/home.asp

PAGE 7: RECOMMENDED RESOURCES FOR PATIENT & FAMILY EDUCATION (CONT'D)

Videos:

- Teen Mental Health (Canadian site- includes two animated videos for children and youth about ADHD)
 http://teenmentalhealth.org/for-families-and-teens/adhd-attention-deficit-hyperactivity-disorder/
- American Academy of Child and Adolescent Psychiatry video for youth and family members http://www.aacap.org/cs/adhd a guide for families video

Books

For Children & Youth:

- Quinn, P & Stern, J. (2012). Putting on the Breaks: Understanding and Taking Control of your ADD or ADHD (3rd Ed.). http://www.apa.org/pubs/magination/441B095.aspx
- Gantos, J. (2011). Joey Pigza Series. http://www.barnesandnoble.com/s/?series id=554202
- Galvin, M. (2001). Otto Learns about his medicine: A Story About Medication for Children With ADHD (3rd Ed.) (for children aged 4-8): http://www.apa.org/pubs/magination/4417726.aspx
- Taylor, J. (2006). Survival Guide for Kids with ADHD.
 www.amazon.ca/Survival-Guide-Kids-With-ADHD/dp/157542195X
- Dendy & Zeigler. (2003). A Bird's Eye View of Life with ADD and ADHD: Advice from Young Survivors.
- Vincent, Annick. (2012). My Brain Needs Glasses: Living with Hyperactivity.
- Walker, Beth. (2005). The Girls Guide to AD/HD: Don't Lose This Book!

For Parents & Caregivers:

- Barkely, Russell. 2013. Taking Charge of ADHD: The Complete, Authoritative Guide for Parents.
- Dendy, Chris. 2006. Teenagers with ADD and ADHD: A Guide for Parents and Professionals.
- Hallowell, E.M. & Jensen, P. (2008). Superparenting for ADD: An Innovative Approach to Raising your Distracted Child. https://www.amazon.ca/Superparenting-ADD-Innovative-Approach-Distracted/dp/0345497767
- Greene, Ross W. (2005). The Explosive Child: A New Approach for Understanding and Parenting Easily Frustrated, Chronically Inflexible Children. http://www.ccps.info/books/index.html
- Dawson, P. & Guare, R. (2009). Smart but Scattered: The Revolutionary "Executive Skills" Approach to Helping Kids Reach Their Potential. http://www.amazon.ca/Smart-but-Scattered-Revolutionary-Executive/dp/1593854455
- Cooper-Kahn, J. & Dietzel, L. (2008). Late, Lost, and Unprepared: A Parents' Guide to Helping Children with Executive Functioning. http://www.amazon.com/Late-Lost-Unprepared-Executive-Functioning/dp/1890627844

PAGE 8: RECOMMENDATIONS FOR THE SCHOOL SETTING

- 1. Ministry of Education to recognize a diagnosis of ADHD as a condition or special need which warrants the development of an Individualized Education Plan (IEP) as per <u>Ministry of Education requirements</u>.
- 2. Ministry of Advanced Education and Universities to expand the core competencies for teachers in training to include information about executive functioning in children and youth with ADHD (e.g., as a component of a Bachelor of Education or Professional Development Program).
- 3. School Districts to promote an understanding of the potential impairments and symptoms of ADHD, and engage the school in participating in wrap-around care and ongoing management of ADHD in collaboration with the family and their health care provider.
- 4. Schools to support and assist teachers in adapting the regular classroom environment to reduce the need for expensive separate programming.
- 5. Schools to promote "ADHD-friendly" classroom environments. Generally speaking, ADHD-friendly environments are encouraging, supportive, and structured, and are likely to benefit all children in the classroom. An ADHD-friendly classroom environment can be created through strategies such as (but not limited to):
 - The development and maintenance of a consistent and collaborative support network (child, school staff, caregivers)
 - Clearly communicated rules and expectations for behaviour between the student and the teacher
 - External supports and visual reminders (e.g., lists, signs, clocks, schedules, cue cards)
 - Modifying the child's environment (e.g., reducing distractions)
 - Increasing the child's motivation (e.g., using frequent and immediate incentives and rewards)

The goal is to **support** the child or youth with ADHD by changing the environment, changing the way adults interact with the child, and changing the tasks that the child is asked to do. Improvements may occur in the child's behaviour and/or skill set, but the child will usually still need continued environmental supports to maintain the advances that have been made. A child's lack of improvement is a signal that the strategies need to be modified, not that the child is resistant.

- 6. Schools to provide teachers and other school professionals with access to resources to support the classroom management of children and youth with ADHD, including encouraging the creation of a professional development day focused on ADHD. Education about ADHD should be targeted for ADHD Awareness Week in October (see PAGE 10: ADHD RESOURCES FOR SCHOOL PROFESSIONALS).
- 7. For children and youth with ADHD who have received support but who continue to experience challenges and impairments, schools should consider appropriate, timely additional assessments.

PAGE 9: EDUCATIONAL ACCOMMODATIONS & BEHAVIOURAL CLASSROOM MANAGEMENT

Below are some examples of strategies which can help support and enhance the learning of students with ADHD in the classroom setting.

- a. Model how to act, provide opportunities to practice, and provide feedback at predetermined times to reinforce behaviour.
- b. Consider preferential seating (**NOTE:** this is not always at the front, it could be at the side at the front or at the back, so that the student is able to stand to work if he/she cannot remain seated without blocking the view to the teacher for other students).
- c. Break down multi-step tasks and instructions and write them out for students to revisit; repeat instructions or redirect student to list as needed.
- d. Check in with the student to maximize comprehension and retention of information after instructions have been given. Check back in with the student frequently.
- e. Work with the student to identify and agree upon specific cues for refocusing. This can be a discreet "symbol" such as teacher touching their shoulder once they have obtained eye contact with student. External aids such as watches with alarms or vibrating devices (e.g., MotivAider) can also be used to encourage self-monitoring and independence.
- f. Provide opportunities for frequent, active breaks (e.g., a trip up/down stairs, bringing materials to the office). Build in fun activities following effortful ones.
- g. Minimize distractions in the classroom.
- h. Ensure that assignment expectations are explicit and presented verbally, as well as visually and concretely.
- i. Use classroom-wide contingencies to meet specific criteria.

Student-specific recommendations:

The following three strategies benefit the majority of students with ADHD:

- 1. Work with the student and their family early in the school year to promote an understanding of the unique needs of students with ADHD and to establish specific expectations that are communicated/reviewed regularly (e.g., using a daily planner, email dialogue, homework sign off from parents, etc.).
- 2. Provide access to "thinking tools" such as a "fidget" object, a wiggle cushion, a ball chair, a pressure or weighted vest, or allowing the student to listen to music on headphones while completing work in order to filter out distractions.
- 3. Use contingencies which are salient to the student to externally reinforce learning outcomes and help the student to manage their behaviour.

In addition to the three recommendations listed above, there are many other strategies that can benefit individual students with ADHD and maximize their ability to learn in the classroom. These strategies should target the specific needs of the student based on an assessment by a school-based team. The strategies should also be identified as goals in each student's Individual Education Plan (IEP). Regular reviews of the IEP can be used to measure the student's progress and to assess the effectiveness of the strategies that have been implemented.

PAGE 10: ADHD RESOURCES FOR SCHOOL PROFESSIONALS

Online Resources:

- B.C. Government resource guide for teaching children with ADHD www.bced.gov.bc.ca/specialed/adhd/
- Alberta Education: Teaching students with ADHD

https://education.alberta.ca/admin/supportingstudent/diverselearning/adhd.aspx

The Kelty Mental Health Resource Centre: ADHD

http://keltymentalhealth.ca/mental-health/disorders/attention-deficit/hyperactivity-disorder

- The Canadian Attention Deficit Hyperactivity Disorder Resource Alliance (CADDRA): Information for educators http://caddra.ca/cms4/index.php?option=com_content&view=article&id=21&Itemid=232&lang=en
- Teach ADHD: Web-based resource for teachers http://research.aboutkidshealth.ca/teachadhd
 Centre for ADD/ADHD Advocacy (CADDAC)
 - http://www.caddac.ca
- (see this article written from the perspective of a student with ADHD: http://caddac.ca/cms/page.php?49)
 Additude Magazine: ADHD & Learning Disabilities School help
 http://www.additudemag.com/channel/adhd-learning-disabilities/index.html
- Inside ADHD: ADHD at School
 - http://www.insideadhd.org/SecondaryPage.aspx?fid=96
- Learning Disabilities Online: Classroom management

www.ldonline.org/ld indepth/teaching techniques/class manage.htm

ADD/ADHD in School: Classroom interventions for ADHD

www.addinschool.com

 BC Children's Hospital ADHD Clinic http://www.bcchildrens.ca/NR/exeres/47E5A945-4956-4194-8CEE-B631B70A959D.htm

Books:

- Brown, T.E. (2005). **Attention Deficit Disorder: The Unfocused Mind in Children and Adults**. New Haven, Connecticut: Yale University Press.
- Dawson, P. & Guare, R. (2012). Executive Skills in Children and Adolescents: A practical guide to assessment and intervention. New York, NY: Guildford Press.
- DuPaul, G.J., & Stoner, G. (2003). **ADHD in the Schools: Assessment and Intervention Strategies**. New York: Guildford Press.
- Minskoff, E., & Allsop, A. (2003). Academic Success Strategies for Adolescents with Learning Disabilities and ADHD. Baltimore, Maryland: Paul Brookes Pub.
- McConnell, K., Ryser, G., & Higgins, J. (2000). Practical Ideas That Really Work for Students with ADHD. Austin, Texas: PRO-ED.
- Nadeau, K.G. (1994). Survival Guide for College Students with ADD or LD. New York: Magination Press.
- Power, T.G., Karustis, J.L., & Habboushe, D.F. (2001). Homework Success for Children with ADHD: A Family-School Intervention Program. New York: Guildford Press.
- Quinn, P.O. (2001). ADD and the College Student: A Guide for High School and College Students with Attention Deficit Disorder. Washington, DC: Magination Press.
- Rief, S. (2005). How to Reach and Teach Children with ADD/ADHD: Practical Techniques, Strategies, and Interventions. San Diego, CA: Educational Resource Specialists.
- Zeigler Dendy, C.A. (2000). **Teaching Teens with ADD and ADHD: A Quick Reference Guide for Teachers and Parents**. Bethesda, MD: Woodbine House.

Additional information and resources on classroom accommodations can be found at <u>CADDAC</u> (see the "School" section) and <u>CADDRA</u> (section for Educators).